

Product Comparison

Technical Data

Product Description

Elastollan® C85A55	Elastollan® C85A exhibits excellent abrasion resistance and toughness, good hydrolytic stability, good heat, oil, fuel and solvent resistance. It has excellent damping characteristics and outstanding resistance to tear propagation. Elastollan® C85A is rated UL-94 HB in vertical flame test for wall thicknesses of 0.9 and 3.0 mm. Elastollan® C85A is supplied uncolored in diced or pelletized form.
Generic TPU-Polyester	This data represents typical values that have been calculated from all products classified as: Generic TPU-Polyester This information is provided for comparative purposes only.

General	Elastollan® C85A55	Generic TPU-Polyester
Manufacturer / Supplier	• BASF Corporation	• Generic
Generic Symbol	• TPU-Polyester	• TPU-Polyester
Material Status	• Commercial: Active	• Commercial: Active
Availability	• North America	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Features	• Abrasion Resistant • Good Tear Strength • Good Toughness • High Heat Resistance • Hydrolytically Stable • Solvent Resistant	--
Appearance	• Colorless	--
Processing Method	• Extrusion • Injection Molding	--

Physical	Elastollan® C85A55	Generic TPU-Polyester	Unit	Test Method
Density / Specific Gravity				
--	1.19	1.17 to 1.24	g/cm³	ASTM D792
--	--	1.18 to 1.25	g/cm³	ISO 1183
--	--	1220	kg/m³	ISO 1183 ²
--	--	0.337 to 1.19	g/cm³	ASTM D1505
Melt Mass-Flow Rate (MFR)				ASTM D1238
190°C/21.6 kg	2.0 to 5.0	--	g/10 min	
190°C/8.7 kg	--	12 to 30	g/10 min	
200°C/8.7 kg	6.0 to 13	--	g/10 min	
Melt Volume-Flow Rate (MVR) (190°C/21.6 kg)	--	34 to 77	cm³/10min	ISO 1133
Molding Shrinkage				
Flow	--	0.39 to 0.91	%	ASTM D955
Across Flow	--	0.79 to 0.82	%	ASTM D955
--	--	0.76 to 0.82	%	ISO 294-4

Mechanical	Elastollan® C85A55	Generic TPU-Polyester	Unit	Test Method
Tensile Modulus				
--	--	5.52 to 51.0	MPa	ASTM D638
Injection Molded	20.7	--	MPa	ASTM D412
--	--	140 to 730	MPa	ISO 527-1
Tensile Stress				ISO 527-2
Break	--	27.5 to 60.7	MPa	
--	--	0.500 to 30.7	MPa	



Thermal	Elastollan® C85A55	Generic TPU-Polyester	Unit	Test Method
Glass Transition Temperature				
--	-40.0	--	°C	Internal Method
--	--	-48.8 to -7.20	°C	ASTM E1356
--	--	-46.0 to -8.05	°C	DSC
Vicat Softening Temperature				
--	110	63.3 to 158	°C	ASTM D1525
--	--	66.7 to 159	°C	ISO 306
Melting Temperature				
--	--	68.0 to 171	°C	
--	--	110 to 221	°C	DSC
CLTE - Flow	--	9.9E-5 to 1.7E-4	cm/cm/°C	ASTM D696
Softening Point - DMA	100	--	°C	Internal Method
Aging	Elastollan® C85A55	Generic TPU-Polyester	Unit	Test Method
Change in Tensile Strength in Air	--	-3.2 to 21	%	ASTM D573 ISO 188
Change in Ultimate Elongation in Air	--	-0.25 to 52	%	ASTM D573 ISO 188
Change in Durometer Hardness in Air	--	-5.1 to 0.13		ASTM D573 ISO 188
Change in Tensile Strength	--	-28 to 20	%	ASTM D471 ISO 1817
Change in Ultimate Elongation	--	-8.5 to 31	%	ASTM D471 ISO 1817
Change in Durometer Hardness	--	-11 to 2.2		ASTM D471 ISO 1817
Change in Volume	--	-1.0 to 2.1	%	ASTM D471 ISO 1817
Flammability	Elastollan® C85A55	Generic TPU-Polyester	Unit	Test Method
Flame Rating				UL 94
0.9 mm	HB	--		
3.0 mm	HB	--		
Thermoset	Elastollan® C85A55	Generic TPU-Polyester	Unit	
Demold Time	--	6.0 to 6.1	min	
Injection	Elastollan® C85A55	Generic TPU-Polyester	Unit	
Drying Temperature	100 to 110	79 to 107	°C	
Drying Time	2.0 to 3.0	2.0 to 4.3	hr	
Dew Point	--	-31 to -30	°C	
Suggested Max Moisture	0.030	0.020 to 0.030	%	
Hopper Temperature	--	29 to 40	°C	
Rear Temperature	190 to 220	170 to 212	°C	
Middle Temperature	190 to 220	173 to 216	°C	
Front Temperature	190 to 220	174 to 216	°C	
Nozzle Temperature	210 to 225	179 to 221	°C	
Processing (Melt) Temp	--	182 to 230	°C	
Mold Temperature	--	23 to 51	°C	
Injection Pressure	--	6.00 to 87.5	MPa	
Holding Pressure	--	3.00 to 4.23	MPa	
Back Pressure	--	0.165 to 10.0	MPa	
Screw Speed	--	49 to 130	rpm	



Where to Buy

Supplier

Elastollan® C85A55

BASF Corporation

Wyandotte, Wyandotte USA

Telephone: 800-545-8359

Web: <https://www.basf.com/us/en.html>

Generic TPU-Polyester

Generic

Distributor

Elastollan® C85A55

Channel Prime Alliance

Telephone: 800-247-8038

Web: <http://www.channelpa.com/>

Availability: North America

Generic TPU-Polyester

Please contact the supplier to find a distributor for Generic TPU-Polyester

